### AEROSPACE BADGE

Activity 1: Design and fly three types of paper airplanes paper airplanes.

### Resources in Kit

☆ CD-ROM: Exploring Aeronautics

#### In this section

- → Paper Airplane Models: Roller, Aero-Glider, Speed Glider
- → Flying Ring
- → Airplane Parts Reference Sheets
- → Aeronautical Glossary

### Suggestions

- ☆ The Roller, Aero-Glider, and Speed Glider are relatively easy paper airplanes to make and they fly well. Have the girls make models and then try modifying the design to improve its performance.
- ☆ The Flying Ring does not look like a paper airplane, but once you figure out how to release it just right, if flies beautifully. After you've mastered flying this model, ask the girls if they think it'll fly. This activity can generate discussion about what makes a plane fly.

## Above and Beyond

- ☆ The websites listed below have directions for making more paper airplanes. Encourage the girls to make adjustments to their planes to improve the flight, just as designers do when working on a new airplane concept.
- ☆ Use the CDROM and the reference pages in this section to learn about the parts of an airplane. Discuss the parts of

the plane with the scouts using the posters as a visual aid.

## Web Resources (on yellow paper)

- ☆ <a href="http://www.learn2.com/06/0646/0646.asp">http://www.learn2.com/06/0646/0646.asp</a>

  This site will show you how to make a Dart and a Basic Glider.
- ☆ <a href="http://www.freehomepages.com/jline/planelist.html">http://www.freehomepages.com/jline/planelist.html</a>

  This site has a wide variety of planes from easy to challenging.
- ☆ <a href="http://www.FlyingToys.com">http://www.FlyingToys.com</a>

  Go to the "free stuff" area for simple directions for paper airplanes.

# **Further Reading**

- ☆ Air & Flying by Evans, David and Claudette Williams.
  Dorling Kindersley, 1993
- → Projects With Flight by John Williams and Gareth Stevens,
  1992
- ☆ Flying by Gail Gibbons, Holiday House, 1986